

California Regional Water Quality Control Board  
Santa Ana Region

ORDER NO. 94-17

AMENDING WASTE DISCHARGE REQUIREMENTS FOR MUNICIPAL SOLID  
WASTE LANDFILLS IN THE SANTA ANA REGION

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), finds that:

1. The Regional Water Quality Control Board regulates the discharge of municipal solid wastes to land through the adoption of waste discharge requirements for owners/operators (hereinafter dischargers) of municipal solid waste landfills (MSWLFs). These waste discharge requirements contain discharge specifications, provisions, and monitoring and reporting requirements which require the owners/operators of the MSWLFs to design and operate the MSWLFs in accordance with Chapter 15, Division 3, Title 23 of the California Code of Regulations.
2. Pursuant to Section 2546, Article 4 of Chapter 15, drainage control systems at MSWLFs are required to divert run-on and runoff away from the disposal areas to prevent ponding, infiltration, inundation, erosion, slope failure, and washout. Ponding and infiltration of water into refuse enhances the production of leachate, which is a potential source of groundwater contamination. Erosion, slope failure and washout of the disposal areas can cause a discharge of pollutants to waters of the United States, which may violate the requirements of the Federal Clean Water Act. An efficient drainage control system requires proper design and regular maintenance. Waste discharge requirements for most of the existing MSWLFs currently either do not contain uniform drainage control requirements or do not specifically require regular maintenance of the drainage control systems to provide effective drainage control. Therefore, these waste discharge requirements need to be amended to prescribe uniform drainage control system requirements and to require ongoing maintenance of these systems.
3. This order amends existing waste discharge requirements for MSWLFs to require the owners/operators to provide and maintain the run-on and runoff drainage control systems to adequately handle the calculated volume of precipitation and peak flows from 100-year, 24-hour storms.

4. On October 9, 1991, the United States Environmental Protection Agency (USEPA) promulgated regulations (Title 40, Code of Federal Regulations, Parts 257 and 258, "federal MSW regulations") that apply, in California, to dischargers who own or operate Class II or Class III landfills at which municipal solid waste is discharged, regardless of whether or not a permit for discharge is issued.
5. On June 17, 1993, the State Water Resources Control Board (State Board) adopted Resolution No. 93-62, entitled Policy for Regulation of Discharges of Municipal Solid Waste, as State Policy For Water Quality Control (Policy), under Section 13140 *et seq.* of the California Water Code (WC §13140 *et seq.*). The Policy directs each Regional Water Quality Control Board to revise the waste discharge requirements of each MSWLF in its respective region to comply with the federal MSW regulations.
6. On September 10, 1993, the Regional Board adopted Order No. 93-57, which amended the existing waste discharge requirements for most of the MSWLFs within the Santa Ana Region. Order No. 93-57 includes provisions and monitoring and reporting requirements to require the owners/operators of these MSWLFs to achieve compliance with Resolution No. 93-62 and the federal MSW regulations.
7. The dischargers are required to comply with amendments contained in this order in addition to the existing waste discharge requirements for the individual MSWLFs and all applicable provisions and monitoring and reporting requirements contained in Order No. 93-57. Waste discharge requirements contained in this order replace the specified waste discharge requirements listed for the MSWLFs in Table 1.
8. This project involves the amendment of waste discharge requirements for existing facilities for which waste discharge requirements need to be revised, and as such, is exempt from the California Environmental Quality Act (Public Resources Code, Section 21100 *et seq.*) in accordance with Section 15301, Chapter 3, Title 14, California Code of Regulations.
9. The Board has notified the dischargers and interested agencies and persons of the Board's intent to amend, hereby, the waste discharge requirements previously adopted for each such discharger, and has provided all notified parties with an opportunity to submit their written views and recommendations.

IT IS HEREBY ORDERED THAT THE DISCHARGERS SHALL COMPLY WITH THE FOLLOWING:

- I. The following waste discharge requirements contained in the following specified orders shall be replaced:

TABLE 1

Order No.	Discharger	Facility Name	Waste Discharge Requirements in existing orders to be replaced
86-192	OCIWMD <sup>1</sup>	Coyote Canyon Landfill	Discharge Requirement A.11., and General Monitoring No. 2, and Reporting No. 2
89-001	OCIWMD	Frank R. Bowerman Landfill	Discharge Requirements A.6. & A.9., General Monitorings A.2., A.3., & A.4., and Reportings C.2.b., C.2.c., & C.2.d.
78-029	OCIWMD	Olinda-Alpha Landfill (Olinda No. 23)	Discharge Specifications A.3., A.8., A.10., Monitoring No. 2, and Reporting Nos. 1 & 2.b.
81-048	OCIWMD	Olinda Landfill (Olinda No. 20)	Requirement No. 1, Monitoring No. 2, and Reporting Nos. 1 & 3
89-034	OCIWMD	Santiago Canyon Landfill	Discharge Specifications A.1.b. & A.1.d., Provision B.4., General Monitoring A.2., and Reporting C.1.b.
81-166	City of Riverside	Tequesquite Landfill	Discharge Specifications A.2., A.6., & A.7., Provision B.11., General Monitoring Nos. 1, 2, 3, and Reporting Nos. 2.b., 2.c., & 2.d.
79-035	RCWMD <sup>2</sup>	Highgrove Landfill	Discharge Specifications A.3. & A.9., General Monitoring Nos. 2, 3, & 4, and Reporting 2.b., 2.c., & 2.d.
81-127	RCWMD	Lamb Canyon Landfill	Discharge Specifications A.2., A.7., & A.8., Provision B.7., General Monitoring Nos. 2, 3, & 4, and Reporting Nos. 2.b., 2.c., & 2.d.
72-029	RCWMD	Double Butte/Winchester Landfill	Waste Discharge Requirement A.3., Provision B.2., General Monitoring Nos. 2, 3, & 4, and Reporting 2.b., 2.c., & 2.d.
74-096	RCWMD	Mead Valley Landfill	Discharge Specifications A.3. & A.7., General Monitoring Nos. 2, 3, & 4, and Reporting Nos. 2.b., 2.c., & 2.d.
55-14	RCWMD	Belltown	Requirement No. 3, Monitoring Nos. 1 & 2, and Reporting Nos. 1, 2, 3, & 4
76-2	RCWMD	Elsinore	Discharge Specifications A.3., A.5., & A.8., General Monitoring Nos. 2, 3, & 4, Reporting Nos. 1, 2, 3, & 4
81-125	RCWMD	West Riverside Landfill	Discharge Specifications A.2., A.8., & A.9., Provision B.7., General Monitoring Nos. 2, 3, & 4, and Reporting Nos. 2.b., 2.c., & 2.d.
81-126	RCWMD	Idyllwild Landfill	Discharge Specifications A.2., A.7., A.8., Provision B.7., General Monitoring Nos. 2, 3, & 4, and Reporting Nos. 2.b., 2.c., & 2.d.
88-065	RCWMD	Corona Landfill	Discharge Specifications A.2.b. & A.2.d., General Monitoring Nos. 2, 3, & 4, and Reporting Nos. 2.b., 2.c., & 2.d.

<sup>1</sup> Orange County Integrated Waste Management Department.

<sup>2</sup> Waste discharge requirements for landfill operation at the site were issued to Riverside County Road Department, which was responsible for landfills prior to the establishment of Riverside County Waste Management Department (RCWMD).

Order No.	Discharger	Facility Name	Waste Discharge Requirements in existing orders to be replaced
88-071	RCWMD	Hemet Landfill	Discharge Specifications No. 2.b. & 2.d., General Monitoring Nos. 2, 3, & 4, and Reporting Nos. 2.b., 2.c., & 2.d.
91-105	RCWMD	San Timoteo Badlands Landfill	Discharge Specifications A.15., A.16., & A.17., General Monitoring Nos. 2, 3, 4, 5, & 6, Reporting Nos. 2.b., 2.c., 2.d., 2.e., & 7
85-131	Western Waste Industries	El Sobrante Landfill	Discharge Specifications A.5., A.6., & A.9., General Monitoring Nos. 3 & 6, and Reporting Nos. 1, 2.c. & 2.e.
79-51	City of Rialto	Rialto Landfill	Discharge Specifications A.3. & A.4., and Reporting No. 1.
81-172	City of Redlands	California Street Landfill	Discharge Specifications A.2., A.3., A.7., & A.8., Provision B.7., Site Monitoring C.2., and Reporting D.4.
88-077	City of Upland	Upland Landfill	Discharge Specifications A.2.b. & A.2.d., Site Monitoring C.1. & C.2., and Reporting D.1. & D.4.
55-005	SBCSWMD <sup>a</sup>	Cresmore Landfill	No requirements deleted; new requirements are added.
62-26	SBCSWMD	Cooley Ranch Landfill	Requirement Nos. 3 & 5
63-24	SBCSWMD	Yucaipa Landfill	Requirement No. 3, Monitoring Nos. 1 & 2, and Reporting Nos. 1, 2, 3, & 4
89-065	SBCSWMD	Verdemont/Cajon	Discharge Specifications A.1.b. & A.1.d., Provision B.4., General Monitoring A.2., and Reporting C.1.b.
89-070	SBCSWMD	Fontana (Mid-Valley) Landfill	Discharge Specifications A.1.b. & A.1.d., Provision B.4., General Monitoring A.2., and Reporting No. 1.b.
78-131	SBCSWMD	San Timoteo Canyon Landfill	Discharge Specifications A.3., A.4., & A.6., and Monitoring No. 2., and Reporting No. 1.
91-039	SBCSWMD	Tropica Rancho/Cotton Landfill	Discharge Specifications A.11., A.12., A.14. & A.15., General Monitoring Nos. 1, 2, 4, & 5, and Reporting Nos. 2.A., 2.B., 2.D., & 3
81-003	SBCSWMD	Milliken Landfill	Discharge Specifications A.2., A.3., A.8., & A.9., Provision B.8., Monitoring No. 2., and Reporting Nos. 1 & 4

II. Existing waste discharge requirements specified for MSWLFs in Table 1, above, shall be replaced by the following requirements:

A. Discharge Specifications

1. Waste management units shall be designed, constructed, and maintained to prevent, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, and washout which could occur as a result of precipitation from a 100-year, 24-hour frequency storm. This shall be accomplished by, at a minimum, the following:
  - a. Top deck surfaces shall be constructed to achieve a minimum of one percent slope and must include structures which will direct water to downdrains.

**A. Discharge Specifications**

1. (continued)
- b. Downdrains and other necessary drainage structures must be constructed for all sideslopes.
- c. All components of the facility drainage system must be designed and constructed to withstand site-specific maximum intensity precipitation (peak flow<sup>4</sup>) from a 100-year, 24-hour storm.
2. Containment structures<sup>5</sup> shall be protected and maintained continuously to prevent commingling of leachate and gas condensate with surface run-on and runoff and to ensure their effectiveness.
3. The dischargers shall design, construct, and maintain:
  - a. A run-on drainage control system to prevent flow from off-site sources onto the disposal areas of the landfill (active or inactive portions), and to collect and divert the calculated volume of precipitation and the peak flow from off-site sources resulting from a 100-year, 24-hour storm.
  - b. A runoff drainage control system to minimize sheet flow from the disposal areas, and to collect and divert the calculated volume of precipitation and the peak flow from on-site surface runoff resulting from a 100-year, 24-hour storm.
  - c. Drainage control structures to divert natural seepage and to prevent the natural seepage from entering the waste management units.
4. The operation of a municipal solid waste landfill facility shall not cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to Section 402.

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<sup>4</sup> Peak flow is the maximum expected flow of run-on and runoff, resulting from precipitation, from on and off-site sources for a given recurrence interval.

<sup>5</sup> Leachate and gas condensate containment systems.

*Revised  
See attached*

A. Discharge Specifications

5. All drainage structures shall be protected and maintained continuously to ensure their effectiveness.

B. Provisions

1. Annually, by October 1, all drainage control system construction and maintenance activities shall be completed. By December 31 of each year, the discharger shall submit a drainage control system maintenance report to the Executive Officer of the Regional Board. The drainage control system maintenance report shall include, but not be limited to, the following information:
  - a. For the previous 12 months, a summary of the adequacy and effectiveness of the drainage control system to collect and divert the calculated volume of precipitation and peak flows resulting from a 100-year, 24-hour storm.
  - b. A tabular summary of the new and existing drainage control structures including the types and completion dates of maintenance activities performed for each of these structures; and
  - c. A 11"x17" site map indicating the locations of the elements listed in Item b., above, and the flow direction of all site drainage.
2. At least 30 days prior to the construction of any new elements of the drainage control system, the discharger shall submit all construction details and calculations for approval of the Executive Officer of the Regional Board.
3. Within four weeks after completion of construction of any new elements of the drainage control system at the site, the discharger shall submit as-built drawings, calculations used, and a written description of the work performed and whether the work performed is in accordance with the construction quality assurance plan. If no construction quality assurance plan has been developed for the work performed, a reason shall be provided.
4. All design plans, construction plans, and operation and maintenance plans shall be prepared by or prepared under the direct supervision of, a registered civil engineer or a registered geologist.
5. Periodic inspection of the waste management units, the drainage control system, and the containment structures shall be performed to assess the conditions of these facilities and to initiate corrective actions necessary to maintain compliance with Discharge Specifications A.1. through A.5.

Revised  
See attached

B. Provisions

6. The facility shall be surveyed once a year either by aerial surveillance or a licensed surveyor to assure compliance with the one percent slope requirements. By December 31 of each year, a map compiled from the survey data shall be submitted to the Regional Board, showing landfill elevations, the direction of all site drainage, the drainage control system, and containment structures.
7. The discharger shall notify the Executive Officer of the Regional Board by telephone (909-782-4130) within 24 hours of any failure of facilities necessary to maintain compliance with requirements in this order. Within five days, the notification shall be submitted in writing to the Executive Officer.

MONITORING & REPORTING PROGRAM NO. 94-17

C. General Monitoring

1. At a minimum, all landfill gas condensate and leachate containment structures shall be inspected and evaluated on a weekly basis for their effectiveness in achieving compliance with Discharge Specification A.2. All deficiencies identified and the dates and types of corrective action taken shall be recorded in a permanent log. All deficiencies shall be photographed for the record. The volume of liquids collected in the containment structures shall be recorded weekly. Liquid samples shall be collected and analyzed on the first working day of each month for constituents on Table A and Table B (Attachment 1). The volume and disposal methods for all liquids shall be recorded in a permanent log.
2. Monthly, the dischargers shall inspect all waste management units and shall evaluate their effectiveness in achieving compliance with Discharge Specification A.1.. All areas of slope failure, differential settlement, fissuring, erosion, ponding, leachate staining, and seepage into or from the landfill shall be identified, field-marked, and documented. In the event seepage is discovered, the location of each seep shall be mapped and a mitigation plan submitted for the approval of the Executive Officer of the Regional Board. All findings shall be photographed for the record.
3. At a minimum, all run-on and runoff drainage control structures shall be inspected and evaluated, on a quarterly basis, for their effectiveness in achieving compliance with Discharge Specifications A.3. and A.4. During dry weather conditions, the effectiveness of the drainage control system shall be evaluated on the basis of its conformance to the as-built drawings, or revised drawings, for the system. All deficiencies shall be identified and recorded.
4. Annually, by October 15, an aerial or ground survey of the landfill facility shall be performed.

D. Reporting

1. Reports prepared for this Monitoring and Reporting Program (M&RP) shall be submitted quarterly to the Regional Board in accordance with the following schedule:

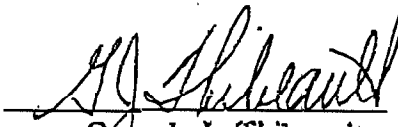
Monitoring Period	Report Due
January - March	April 30
April - June	July 31
July - September	October 31
October - December	January 31

2. The Quarterly General Monitoring Report shall include:
  - a. A summary of the containment structure, waste management unit, and drainage control system records for the previous monitoring period listed in Item 1, above. The summary shall include a list of deficiencies identified and the dates and types of corrective actions taken to achieve compliance with the requirements contained in this order. If corrective actions for identified deficiencies could not be implemented by the end of the monitoring period, the dischargers shall provide the reason(s) for noncompliance and a time schedule for implementing the corrective actions.
  - b. The analytical results of any liquid samples collected during the monitoring period.
3. Annually, by December 31, the following reports shall be submitted:
  - a. A drainage control system maintenance report as required under Provision B.1., and
  - b. A facility site map as required under Provision B.6.

- III. All terms and conditions contained in the existing waste discharge requirements for MSWLFs which are not amended by this order shall remain in effect and unchanged. Waste discharge requirements contained in this order supersede any conflicting provisions in the existing waste discharge requirements.

III. (continued)

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region.

  
Gerard J. Thibeault  
Executive Officer

March 11, 1994

**TABLE A**

Parameter	EPA Method	Parameter	EPA Method
<b>GENERAL</b>		<b>GENERAL - CONT'D</b>	
Total Hardness	130	Total Dissolved Solids	160.1
Bicarbonate ( $\text{HCO}_3$ )	310.2	Chemical Oxygen Demand	410
Carbonate ( $\text{CaCO}_3$ )	310.2	Phenols	420.1
Total Alkalinity	310.1	Total Organic Carbon	415
Total Cations	<sup>1</sup>	Total Organic Halogens	450.1
Total Anions	<sup>1</sup>	Calcium (Ca)	200.7/215
Hydroxide (OH)	<sup>2</sup>	Magnesium (Mg)	200.7/242.1
Chloride (Cl)	325	Manganese (Mn)	200.7/243.1
Fluoride (F)	340	Potassium (K)	200.7/258.1
Nitrate ( $\text{NO}_3$ )	353.2	Sodium	200.7/273.1
Sulfate ( $\text{SO}_4$ )	375	Iron (Fe)	200.7/236.1
Phosphate ( $\text{PO}_4$ )	365.2	Zinc (Zn)	200.7/289.1
Total Phosphorus	365.1/365.2	<b>VOLATILE ORGANICS</b>	601
Boron (B)	212.3/200.7	<b>PURGEABLE AROMATICS</b>	602
Specific Conductance	120.1		
pH	150.1		

**ATTACHMENT 1**  
**Order No. 94-17**

<sup>1</sup> Total cations and anions are determined by the summation of all cations and anions, respectively, in the sample analyzed.

<sup>2</sup> The standard method SM 2330B in the "Standard Methods for the Examination of Water and Wastewater" for hydroxide ion analysis shall be used.

TABLE B

Parameter	EPA Method	Parameter	EPA Method
<b>METALS</b>		N-Nitrosodiphenylamine	625
Aluminum (Al)	202	Bis (2-Ethylhexyl) Phthalate	"
Antimony (Sb)	204	Bis(1-Benzyl) Phthalate	"
Arsenic (As)	206	Di-N-Butyl Phthalate	"
Barium (Ba)	208	Di-N-Octyl Phthalate	"
Beryllium (Be)	210	Diethyl Phthalate	"
Cadmium (Cd)	213	Dimethyl Phthalate	"
Chromium, total (Cr)	218.1/218.2	Benzo (A) Anthracene	"
Chromium, hexavalent	312B	Benzo (A) Pyrene	"
Cobalt (Co)	219	Benzo (B) Fluoranthene	"
Copper (Cu)	220	Benzo (K) Fluoranthene	"
Lead (Pb)	239	Chrysene	"
Mercury (Hg)	245.1/245.2	Acenaphthylene	"
Molybdenum (Mo)	246	Anthracene	"
Nickel (Ni)	249	1,12-Benzoperylene	"
Selenium (Se)	270	Fluorone	"
Silver (Ag)	272	Acenaphthene	"
Thallium (Tl)	279	Benidine	"
Vanadium (V)	286	Phenanthrene	"
<b>ACID EXTRACTABLES</b>		1,2,3,6-Dibenzanthracene	"
1,3,6-Trichlorophenol	625	Indene (1,2,3-CD) Pyrene	"
p-Chloro-M-Cresol	"	Pyrene	"
2-Chlorophenol	"	TCDD	"
2,4-Dichlorophenol	"	<b>PESTICIDES</b>	
2,4-Dimethylphenol	"	Aldrin	608
2-Nitrophenol	"	Chlordane	"
4-Nitrophenol	"	Dieldrin	"
2,4-Dinitrophenol	"	4,4'-DDT	"
2,6-Dinitro-Cresol	"	4,4'-DDE	"
Pentachlorophenol	"	4,4'-DDD	"
Phenol	"	Alpha Endosulfan	"
<b>BASE/NEUTRAL EXTRACTABLES</b>		Beta Endosulfan	"
1,2,4-Trichlorobenzene	625	Endosulfan Sulfate	"
2,4-Dinitrotoluene	"	Endrin	"
1,3-Dichlorobenzene	"	Endrin Aldehyde	"
1,4-Dichlorobenzene	"	Heptachlor	"
3,3-Dichlorobenzidine	"	Heptachlor Epoxide	"
2-Chloronaphthalene	"	Alpha BHC	"
1,2-Diphenylhydrazine	"	Beta BHC	"
Fluoranthene	"	Gamma BHC (Lindane)	"
1,2-Dichlorobenzene	"	Delta BHC	"
2,6-Dinitrotoluene	"	Toxaphene	"
4-Chlorophenyl Phenyl Ether	"	PCB 1016	"
Hexachlorobenzene	"	PCB 1221	"
Hexachloroethane	"	PCB 1232	"
Bis (2-Chloroethyl) Ether	"	PCB 1242	"
4-Bromophenyl Phenyl Ether	"	PCB 1248	"
Bis (2-Chloroisopropyl) Ether	"	PCB 1254	"
Bis (2-Chloroethoxy) Methane	"	PCB 1260	"
Hexachlorobutadiene	"	Methoxychlor	509A
Hexachlorocyclopentadiene	"	Chlorophenoxy:	
Isophorene	"	2,4-D	509B
Naphthalene	"	2,4,5-TP Silver	509B
Nitrobenzene	"		
N-Nitrosodimethylamine	"		
N-Nitrosodi-N-Propylamine	"		

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SANTA ANA REGION**

1000 AVENUE, SUITE 100  
SANTA ANA, CA 92707-2409  
TEL: (909) 782-4130  
(909) 781-6238

*Charles [unclear] [unclear]*  
*for [unclear]*



April 11, 1994

Mr. Murry L. Cable, Director  
Orange County Integrated Waste Management  
320 N. Flower Street, Suite 400  
Santa Ana, CA 92703

**TRANSMITTAL OF REVISED MONITORING AND REPORTING PROGRAM, ORDER NO. 94-17, AMENDING WASTE DISCHARGE REQUIREMENTS FOR THE FOLLOWING LANDFILLS IN ORANGE COUNTY: COYOTE CANYON LANDFILL, ORDER NO. 86-192; FRANK R. BOWERMAN LANDFILL, ORDER NO. 89-001; OLINDA-ALPHA NO. 23 LANDFILL, ORDER NO. 78-029; OLINDA NO. 20 LANDFILL, ORDER NO. 81-048; SANTIAGO CANYON LANDFILL, ORDER NO. 89-034**

Dear Mr. Cable:

Enclosed is a copy of the revised portion of the monitoring and reporting program of Order No. 94-17, which was adopted by the Board on March 11, 1994, amending the above referenced orders. The revised portion, General Monitoring C.1., of Monitoring and Reporting Program No. 94-17 is in bold print. This portion of Monitoring and Reporting Program No. 94-17 is being revised in response to the Riverside County Waste Management Department's request.

Please replace existing Pages 6 and 7 of Order No. 94-17 with the copy enclosed. A copy of Attachment 1, which was inadvertently omitted from Order No. 94-17, is also enclosed.

Should you have any questions, please contact Dixie Lass of our Land Disposal Section at (909) 782-3295 or Joanne Lee of her staff at (909) 782-3291.

Sincerely,

*[Signature of Gerard J. Thibeault]*

Gerard J. Thibeault  
Executive Officer

Enclosures: Copy of Pages 6 and 7 of Order No. 94-17  
Copy of Attachment 1 of Order No. 94-17

cc (w/enclosure): Orange County Health Care Agency, LEA -  
Patricia Henshaw

JPL4/94-17.adp

A. Discharge Specifications

5. All drainage structures shall be protected and maintained continuously to ensure their effectiveness.

B. Provisions

1. Annually, by October 1, all drainage control system construction and maintenance activities shall be completed. By December 31 of each year, the discharger shall submit a drainage control system maintenance report to the Executive Officer of the Regional Board. The drainage control system maintenance report shall include; but not be limited to, the following information:
  - a. For the previous 12 months, a summary of the adequacy and effectiveness of the drainage control system to collect and divert the calculated volume of precipitation and peak flows resulting from a 100-year, 24-hour storm.
  - b. A tabular summary of the new and existing drainage control structures including the types and completion dates of maintenance activities performed for each of these structures; and
  - c. A 11"x17" site map indicating the locations of the elements listed in Item b., above, and the flow direction of all site drainage.
2. At least 30 days prior to the construction of any new elements of the drainage control system, the discharger shall submit all construction details and calculations for approval of the Executive Officer of the Regional Board.
3. Within four weeks after completion of construction of any new elements of the drainage control system at the site, the discharger shall submit as-built drawings, calculations used, and a written description of the work performed and whether the work performed is in accordance with the construction quality assurance plan. If no construction quality assurance plan has been developed for the work performed, a reason shall be provided.
4. All design plans, construction plans, and operation and maintenance plans shall be prepared by or prepared under the direct supervision of, a registered civil engineer or a registered geologist.
5. Periodic inspection of the waste management units, the drainage control system, and the containment structures shall be performed to assess the conditions of these facilities and to initiate corrective actions necessary to maintain compliance with Discharge Specifications A.1. through A.5.

**B. Provisions**

6. The facility shall be surveyed once a year either by aerial surveillance or a licensed surveyor to assure compliance with the one percent slope requirements. By December 31 of each year, a map compiled from the survey data shall be submitted to the Regional Board, showing landfill elevations, the direction of all site drainage, the drainage control system, and containment structures.
7. The discharger shall notify the Executive Officer of the Regional Board by telephone (909-782-4130) within 24 hours of any failure of facilities necessary to maintain compliance with requirements in this order. Within five days, the notification shall be submitted in writing to the Executive Officer.

**MONITORING & REPORTING PROGRAM NO. 94-17**

**C. General Monitoring**

1. At a minimum, all landfill gas condensate and leachate containment structures shall be inspected and evaluated on a weekly basis (active sites) or monthly basis (inactive/closed sites) for their effectiveness in achieving compliance with Discharge Specification A.2. All deficiencies identified and the dates and types of corrective action taken shall be recorded in a permanent log. All deficiencies shall be photographed for the record. The volume of liquids collected in the containment structures shall be recorded weekly for active sites or monthly for inactive/closed sites. Liquid samples shall be collected and analyzed quarterly for constituents on Table A and Table B (Attachment I). The volume and disposal methods for all liquids shall be recorded in a permanent log.
2. Monthly, the dischargers shall inspect all waste management units and shall evaluate their effectiveness in achieving compliance with Discharge Specification A.1.. All areas of slope failure, differential settlement, fissuring, erosion, ponding, leachate staining, and seepage into or from the landfill shall be identified, field-marked, and documented. In the event seepage is discovered, the location of each seep shall be mapped and a mitigation plan submitted for the approval of the Executive Officer of the Regional Board. All findings shall be photographed for the record.
3. At a minimum, all run-on and runoff drainage control structures shall be inspected and evaluated, on a quarterly basis, for their effectiveness in achieving compliance with Discharge Specifications A.3. and A.4. During dry weather conditions, the effectiveness of the drainage control system shall be evaluated on the basis of its conformance to the as-built drawings, or revised drawings, for the system. All deficiencies shall be identified and recorded.
4. Annually, by October 15, an aerial or ground survey of the landfill facility shall be performed.